



## Inflammation and Infection

# Mesenteric Fibromatosis Mimicking Tumor Recurrence Following Radical Cystectomy and Bladder Replacement



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## ARTICLE INFO

## Article history:

Received 26 November 2014

Received in revised form

16 December 2014

Accepted 17 December 2014

Available online 19 January 2015

## Keywords:

Mesenteric fibromatosis

Cystectomy

Urothelial carcinoma

## ABSTRACT

We report an unusual case of benign tumor mimicking tumor recurrence following radical cystectomy and bladder replacement for high grade urothelial carcinoma.

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## Introduction

Following radical cystectomy, growing abdominal mass is usually suspected as tumor recurrence and should be accordingly approached. Nevertheless, benign abdominal tumors are still rarely encountered among which only one case of mesenteric fibromatosis following salvage cystectomy has been previously reported.<sup>1</sup>

In this report we present an unusual case of mesenteric fibromatosis mimicking tumor recurrence following radical cystectomy and bladder replacement for invasive urothelial carcinoma.

## Case report

A 69 yr old gentleman was presented with high grade invasive urothelial carcinoma of the bladder.

He underwent radical cysto-prostatectomy followed by bladder replacement according to Mainz I technique with an appendiceal cutaneous stoma.

Pathological stage was PT<sub>2</sub>N<sub>0</sub>M<sub>0</sub>.

Operative and post-operative course were uneventful.

The patient was followed regularly at 6 months intervals with no evidence of recurrence. An abdominal CT scan performed 5 years postoperatively demonstrated left lower quadrant abdominal mass,

located anterior to the reconstructed bladder, but without any linkage to it (Figs. 1 and 2). Needle biopsy of the mass revealed a pseudosarcomatous fibromyxoid tumor. The mass appeared to grow significantly in repeat CT scan 3 months later and surgical exploration was suggested. At laparotomy a 15 cm in diameter mass was found, originating from the small bowel mesenteric root and involving a couple of terminal ileum loops at a total length of 50 cm. Complete removal was achieved. The neobladder and the cutaneous stoma were successfully preserved.

No enlarged lymph nodes were found and neither peritoneal spread nor parenchymal involvement were seen. The histopathological findings were consistent with mesenteric fibromatosis. Surgical margins were free. No recurrence was noted within a period of 5 years follow up.

## Discussion

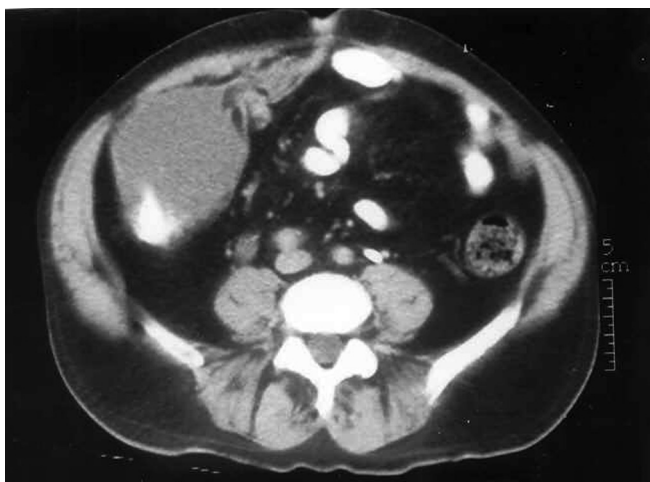
Mesenteric fibromatosis, a rare benign tumor, is a member of the fibromatoses family, which accounts for 2–4:100,000 cases per year.<sup>2</sup>

Fibromatoses, referred also as Desmoid tumors, tend to recur locally though it seldom metastasizes.<sup>1–3</sup> Whenever intra-abdominal, fibromatoses are usually solitary and can be found in the small bowel mesentery (most commonly), gastro-hepatic ligament, transverse mesocolon and omentum.<sup>1,4</sup>

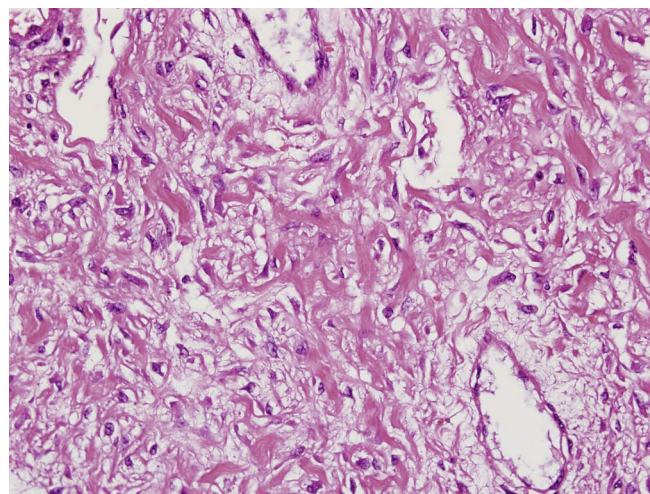
Macroscopically they are solitary lesions, but can be multicentric.<sup>1</sup>

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**Figure 1.** A reconstructed urinary bladder according to Mainz I technique with an appendiceal stoma.



**Figure 3.** Mesenteric fibromatosis – hematoxylin and eosin stain.



**Figure 2.** An abdominal mass (denoted by arrow) that has no linkage to the reconstructed bladder.

Their cut surface is glistening pinky-white and whorled. Microscopically the tumors consist of well differentiated fibroblasts of uniform size with no evidence of mitotic activity. Inflammatory infiltration is absent. Cellularity and collagen content are variable (Fig. 3).<sup>2</sup>

Clinical symptoms vary from asymptomatic abdominal mass, vague abdominal discomfort or abdominal pain with or without weight loss.<sup>3,4</sup>

Complications of fibromatoses include bowel obstruction and bowel perforation.<sup>2,3</sup>

Ureteric compression and hydronephrosis, as a complication of an isolated mesenteric fibromatosis were also reported.<sup>5</sup>

The exact etiology is unknown. Conditions that were found to be in association with high incidence of mesenteric fibromatosis include Gardner's syndrome, especially following colectomies; pregnancy and surgical trauma.<sup>1–3</sup>

Surgical removal is the definitive treatment for mesenteric fibromatosis.<sup>1,3</sup>

In case of surgical failure or non-resectable tumors, pharmacological treatment has been proposed using NSAIDs or an anti-estrogen receptors agents.<sup>2,3</sup>

Radiotherapy or multidrug chemotherapeutic regimens such as Actinomycin D, Doxorubicine, Vincristine and Cyclophosphamide were also suggested,<sup>1,3</sup> however only partial success was gained in reducing or eradicating the tumoral mass.

Although benign in nature, mesenteric fibromatosis tends to recur, thus careful attention and a long term follow up are required.

## Conclusion

Abdominal mass following radical cystectomy for invasive urothelial carcinoma should always be suspected for tumor recurrence, yet the differential diagnosis also consists of benign conditions mimicking recurrence but are not life threatening.

## Conflict of interest

None declared.

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